In the CLAIMS:

The pending claims are claims 1, 3-18, and 21-22, 24, 25, and 29-35. Claims 2, 19, and 20 were cancelled previously. Claims 23, and 26-28 are cancelled herein. Claims 30-35 are new.

1. (Currently amended) A puncture and cut resistant material comprising:

a plurality of substantially spherical macrospheres;

wherein each macrosphere comprises: ~~, each macrosphere comprising:~~

a plurality of substantially spherical microspheres aggregated together in a substantially spherical shape; and

a polymer ~~surrounding and aggregating~~ binding together the plurality of microspheres ~~together~~;

wherein the polymer is in interstices between the microspheres and surrounds the aggregated plurality of microspheres to form the substantially spherical macrosphere.

2. (Cancelled)

3. (Currently amended) The puncture and cut resistant material of claim 1 wherein each macrosphere further comprises ~~comprising for each of the plurality of macrospheres~~:

a plurality of capture devices;

wherein [,] each capture device ~~comprising~~ comprises an area of polymer in the interstices between adjacent aggregated microspheres in the macrosphere ~~and the polymer surrounding the adjacent microspheres~~; [and]

wherein the plurality of aggregated microspheres in the macrosphere and the polymer aggregating the microspheres to form the macrosphere ~~surrounding polymer~~ create a plurality of

capture devices surrounding the macrosphere; and

wherein each capture device is adapted to capture a point of an invading sharp instrument.

4. (Original) The puncture and cut resistant material of claim 1 wherein:

the microspheres comprise alumina.

5. (Original) The puncture and cut resistant material of claim 1 wherein:

the microspheres comprise a magnetically sensitive material.

6. (Original) The puncture and cut resistant material of claim 1 wherein:

each microsphere has a diameter of approximately 5 to 10 mils; and

each macrosphere has a diameter of approximately 20 to 60 mils.

7. (Original) The puncture and cut resistant material of claim 1 wherein:

the polymer comprises high density polyethylene.

8. (Original) The puncture and cut resistant material of claim 1 further comprising:

a first array of adjacent macrospheres; and

an elastomer encapsulating the first array of adjacent macrospheres.

9. (Currently amended) The puncture and cut resistant material of claim 8 further comprising:

a second array of adjacent macrospheres overlaying and stacked on the first array; and

a third array of adjacent macrospheres overlaying and stacked on the second array;

wherein the elastomer encapsulates the first, second, and third stacked arrays of adjacent macrospheres.

10. (Currently amended) The puncture and cut resistant material of claim 9 wherein the elastomer encapsulated first, second, and third stacked arrays of adjacent macrospheres form a puncture resistant surgical glove.

11. (Currently amended) A puncture and cut resistant material comprising:

a plurality of substantially spherical porous macrospheres;

wherein each macrosphere comprises: ~~, each macrosphere comprising:~~

a substantially spherical porous structure ~~having a porous surface~~ comprising a plurality of random pores on the surface of said porous structure; and

a polymer coating over the porous structure;

wherein the polymer coating over the porous structure coats said random pores forming ~~forms~~ a substantially spherical macrosphere having a substantially smooth surface.

12. (Currently amended) The puncture and cut resistant material of claim 11 further comprising for each of the plurality of substantially spherical porous macrospheres:

a plurality of capture devices;

wherein [,] each capture device comprises ~~comprising~~:

one of the plurality of random pores and the polymer coating over the random pore;

wherein each capture device is adapted to capture a point of an invading sharp instrument.

13. (Original) The puncture and cut resistant material of claim 11 wherein:

the substantially spherical porous macrospheres comprise porous aluminum oxide.

14. (Original) The puncture and cut resistant material of claim 11 wherein:

the substantially spherical porous macrospheres comprise a magnetically sensitive material.

15. (Original) The puncture and cut resistant material of claim 11 wherein:

each substantially spherical porous macrosphere has a diameter of approximately 60 to 120 mils.

16. (Original) The puncture and cut resistant material of claim 11 wherein:

the polymer comprises high density polyethylene.

17. (Currently amended) The puncture and cut resistant material of claim 11 further comprising:

a first array of adjacent substantially spherical porous macrospheres;

a second array of adjacent substantially spherical porous macrospheres overlaying and stacked on the first array;

a third array of adjacent substantially spherical porous macrospheres overlaying and stacked on the second array; and

an elastomer encapsulating the first, second, and third stacked arrays of adjacent substantially spherical porous macrospheres.

18. (Currently amended) A puncture and cut resistant surgical glove comprising:

a plurality of overlaying and stacked arrays of adjacent substantially spherical macrospheres, each macrosphere having a plurality of capture devices, each capture device adapted to capture a point of an invading sharp instrument; and

an elastomer encapsulating the plurality of overlaying and stacked arrays of adjacent macrospheres;

wherein each substantially spherical macrosphere having a plurality of capture devices comprises:

a plurality of substantially spherical microspheres aggregated together in a substantially spherical shape; and

a polymer ~~surrounding and aggregating~~ binding together the plurality of microspheres ~~together~~;

wherein the polymer is in interstices between the microspheres and surrounds the aggregated plurality of microspheres to form the substantially spherical macrosphere;

wherein each capture device comprises an area of polymer in the interstices between adjacent aggregated microspheres in the macrosphere ~~between adjacent microspheres and the polymer surrounding the adjacent microspheres~~; and

wherein the plurality of aggregated microspheres and surrounding polymer surround the macrosphere ~~create~~ with the [a] plurality of capture devices ~~surrounding the macrosphere; and~~

~~wherein each capture device is adapted to capture a point of an invading sharp instrument; and~~

~~an elastomer encapsulating the plurality of overlaying arrays of adjacent macrospheres~~.

19. (Cancelled)

20. (Cancelled)

21. (Original) The puncture and cut resistant surgical glove of claim 18 wherein:

each macrosphere has a diameter of approximately 20 to ~~120~~ 60 mils.

22. (Original) The puncture and cut resistant surgical glove of claim 18 wherein:

each macrosphere comprises a magnetically sensitive material.

23. (Cancelled) A method of producing a puncture and cut resistant material comprising the steps of:

forming a plurality of substantially spherical macrospheres, each macrosphere having a plurality of capture devices, each capture device adapted to capture a point of an invading sharp instrument; and

injecting the macrospheres and an elastomer into an injection mold.

24. (Currently amended) A ~~The~~ method ~~of claim 23~~ for producing a puncture and cut resistant material ~~wherein the steps of forming a plurality of substantially spherical macrospheres comprises~~ comprising the steps of:

spraying droplets of molten alumina;

cooling the droplets to form substantially spherical microspheres;

spraying droplets of a solution of microspheres and liquefied polyethylene; and

cooling the droplets to form macrospheres, each macrosphere comprising ~~aggregated~~ microspheres aggregated together in a substantially spherical shape and bound together and coated with polyethylene.

25. (Currently amended) A ~~The~~ method ~~of claim 23~~ for

producing a puncture and cut resistant material ~~wherein the steps of forming a plurality of substantially spherical macrospheres comprises~~ comprising the steps of:

spraying droplets of molten alumina and a second material that volatizes at a lower temperature than the alumina;

cooling the droplets to form porous substantially spherical macrospheres;

tumbling the porous macrospheres with an abrasive to open up the surface and remove any intact surface film of alumina;

spraying droplets of a solution of porous macrospheres and liquefied polyethylene; and

cooling the droplets to form polyethylene coated porous macrospheres;

wherein when the second material volatizes at the lower temperature, bubbles are formed in the droplets forming the porous macrospheres.

26. (Cancelled) A method of producing a puncture and cut resistant material comprising the steps of:

forming magnetically sensitive substantially spherical macrospheres, each macrosphere having a plurality of capture devices, each capture device adapted to capture a point of an invading sharp instrument;

dipping a former comprising electro-magnetic elements into a solution of the magnetically sensitive macrospheres and an elastomer; and

activating the electro-magnetic elements;

whereby activating the electro-magnetic elements draws the magnetically sensitive macrospheres onto surfaces of the former.

27. (Cancelled) The method of claim 26 for producing a puncture and cut resistant material wherein the steps of forming substantially spherical magnetically sensitive

macrospheres comprises the steps of:

spraying droplets of molten alumina comprising a magnetically sensitive material;

cooling the droplets to form microspheres;

spraying droplets of a solution of microspheres and liquefied polyethylene; and

cooling the droplets to form macrospheres, each macrosphere comprising aggregated microspheres coated with polyethylene.

28. (Cancelled) The method of claim 26 for producing a puncture and cut resistant material wherein the steps of forming substantially spherical macrospheres comprises the steps of:

spraying droplets of molten alumina comprising a magnetically sensitive material and a second material that volatizes at a lower temperature than the alumina;

cooling the droplets to form porous magnetically sensitive macrospheres;

tumbling the porous magnetically sensitive macrospheres with an abrasive to open up the surface and remove any intact surface film of alumina;

spraying droplets of a solution of porous magnetically sensitive macrospheres and liquefied polyethylene; and

cooling the droplets to form polyethylene coated porous magnetically sensitive macrospheres;

wherein when the second material volatizes at the lower temperature, bubbles are formed in the droplets forming the porous magnetically sensitive macrospheres.

29. (Currently amended) The puncture and cut resistant material of claim 17 wherein the elastomer encapsulated first, second, and third stacked arrays of adjacent macrospheres form a puncture resistant surgical glove.

30. (New) The method of claim 24 further comprising the step of injecting the macrospheres and an elastomer into an injection mold.

31. (New) The method of claim 24 wherein the step of spraying droplets of molten alumina further comprises the step of spraying droplets of molten alumina comprising a magnetically sensitive material;

wherein the formed macrospheres are magnetically sensitive.

32. (New) The method of claim 31 further comprising the steps of:

dipping a former comprising electro-magnetic elements into a solution of the magnetically sensitive macrospheres and an elastomer; and

activating the electro-magnetic elements;

whereby activating the electro-magnetic elements draws the magnetically sensitive macrospheres onto surfaces of the former.

33. (New) The method of claim 25 further comprising the step of injecting the porous macrospheres and an elastomer into an injection mold.

34. (New) The method of claim 25 wherein the step of spraying droplets of molten alumina and a second material that volatizes at a lower temperature than the alumina further comprises the step of spraying droplets of molten alumina comprising a magnetically sensitive material and a second material that volatizes at a lower temperature than the alumina

wherein the formed porous macrospheres are magnetically sensitive.

35. (New) The method of claim 34 further comprising the steps of:

dipping a former comprising electro-magnetic elements into a solution of the magnetically sensitive porous macrospheres and an elastomer; and

activating the electro-magnetic elements;

whereby activating the electro-magnetic elements draws the magnetically sensitive porous macrospheres onto surfaces of the former.